STATE OF THE NET



State of the Net - February 12 2024 03 Keynote with Representative Don Beyer

The Honorable Don Beyer - Representative of Virginia's 8th Congressional District, US House of Representatives

Don Beyer

Good morning. And Todd, thank you very much for the kind introduction. I'm a big fan of the Internet Education Foundation. I was reading again the materials yesterday, about the mission being the potential for decentralized global Internet to promote communication, commerce and democracy. It reminded me of the last couple of days. I was with my daughter watching the Superbowl last night, first time ever she's wanted to watch the Superbowl, just fascinated. There's people watch football, and people who watch Taylor watching football, and so every time Kelce would catch a pass, it'd be very exciting. But, I realized she's 28 years old, I've never seen her read a book, and she knows more than almost anybody I know on the planet. As a father, you're always able to supposed to be able to answer your kids questions. I can never do that, because she is so full of knowledge, which she only gets because there is an Internet.

I was at a meeting Friday morning with Maxwell Frost, who is the first Gen Z member ever elected to Congress at age 25. He pointed out that statistics show that Gen Z, which is 1997 to 2010, is the most politically engaged generation in American history, when measured by how many, what

percentage of them are actually voting, and showing up and campaigning, and doing things like that. Again, I don't think we have anybody to thank but the Internet, because my generation, if you're a young person, where do you get your news, the evening news which we didn't watch, and the newspapers that we didn't read, but they're there with that information day in and day out, and are far more engaged, which I think, again, to pick up on Alan's comment, makes me very optimistic.

This is really an interesting time. I'm going to be following Alan around. The press conference with Gina Raimondo is in Virginia Tech in my district, in Arlington this afternoon, to talk about open networks and building this out.

Let me just talk for a minute about the Internet, and I confess I know a lot more about AI than the Internet, but I am a huge fan of net neutrality, partly because Tom Wheeler is the only boss I've had in my adult life. When Tom was the FCC chair, with John Sallet, whom a dear friend, as general counsel, they made it happen, only to have it reversed during the Trump administration, but, thanks to this Biden administration it's coming back, and I know, at least from my four very Internet-savvy children, they feel that net neutrality is among the most important things. That you don't let one company, or any set of companies, throttled down on who has access, and who doesn't.

I've also been very proud of everything that Alan was talking about with this administration, the connectivity and the broadband. A long, long time ago, when I was lieutenant governor, early 1990s, I spent 100 different visits to southwest Virginia, the coal fields, which even then was in great decay, because we'd already taken all the coal out. You had schools shrinking, most people on federal benefits of some kind. The notion even then was, if we could just get Internet connectivity, the last mile to the house, it would change the way rural Virginia, southwest Virginia, but rural America, has worked. And now, with the leadership of the President, Representative Jim Clyburn, especially, we've put those billions of dollars out there.

Alan was picking on us about not being able to extend the program for the low income connectivity. I don't know what he's pessimistic about, we funded Ukraine, and Israel, and we got border security, oh forget it, didn't we? You know, the do-nothing Congress has really done nothing. However, I am optimistic, because it's not a partisan issue. In fact, I'm a Democrat, but most of the people served by the low income connectivity are Republicans, the rural Republicans, and I think my friends on the other side are going to join with us to make sure that we extend that. We talked a lot about privacy. Again, when I talk about AI, I usually start with the fact that we've had social media around in a major way for 25-ish years, and the only bill we've passed is the 230 to keep them from being sued, and we've done absolutely nothing to protect the American people, or to build privacy out. It seems to be almost impossible so far, but we haven't given up, because more and more people... In fact, every time I'm in a public setting, townhall meetings, people are concerned about who's collecting their data, who's selling their data, how's the data getting into China or other people? How is the data getting to the NSA, our own national security apparatus? So, enormous amount of concern about it? And, the difference in privacy that comes from your healthcare records, versus the privacy concerns that come from your online shopping. Really different stuff. I'm very hopeful. My friend, Bill Foster, who is a member of Congress, you know, PhD physicist, has been pushing hard for a national digital signature, that is unique and unbreakable, as a way of the first step towards protecting our own individual privacy, and perhaps linking it with blockchain, so that we own it, you get paid for it when other people use it.

Take the Henrietta Lacks situation. For those of you who are into biology, one poor African American woman in the early 1950s who had cancer, and we have been leveraging off of her data now for my entire lifetime. We're now leveraging off of all of our data, and the data brokers are getting very rich selling it.

They mentioned, Cat and Alan, about the Senate Judiciary Committee, that raises the whole issue on social media of what regulations you put in place. Should the responsibility sit with the parents, or with the people making the content? I talked to my oldest daughter on the way in, this morning, how do her 12 year old and 10 year old, what access do they have to the social media beyond the football game? I've got an interesting bill, with a lot of bipartisan support, modeled on what Finland has done, where they, for the last number of years, have decided, from K through 12, to educate their kids on digital literacy, basically to make them skeptics, to teach them to look for secondary and tertiary and quaternary sources for almost everything they read, rather than the very first thing that QAnon pops up. And it works.

But, let me turn to Al because I know a little bit more about that, anyway. Todd mentioned my work at at George Mason University. I always thought, when I got old, I tried to find some job that surrounded me with young people, so I'd stay young. So, I get to work on the Hill, where everyone's 26, and then I get to George Mason University where I think I'm the oldest student there, and everyone treats me nicely, because they think I'm part of the administration or something. But, it's been wonderful fun. I was first impressed by this, when I read an Eric Sevareid graduation speech in the early 1980s, I think it was at William and Mary, when he talked about -- this is like 45 years ago -- there was so much information in the world, that we could no longer see

the connections between this vast body of information, not just that we couldn't see the correlations, then therefore we also couldn't see the causes and effect. Jump forward to 2024, and realize that last year in 2023, we, the world, generated more data than in the first 2000 years of the common era. In just one year.

I was on the Space Committee for a couple of years. Our satellites that are up there, 6500 right now, are downloading so much data every day that 95% of it is never even looked at. So, there's an enormous amount of information, if only we could figure out how to look at it, how to examine it, how to dive deep into it. I decided to take an AI course at Stanford, on Coursera, a couple of years ago, I was loving the first three weeks, till I got to zero on the first exam. So, I realized I didn't know Python, I didn't know linear algebra, I was hopeless. Now though, it's really fun. I've got a long, long way to go. The nice part about studying in those, my middle daughter is a senior software engineer. I've gotten much closer to her in the last year, because I got to call her every night to help me with my homework.

On the policy part, though, it's tricky. I, again, tend to very much be on the optimistic side of the AI curve, because... Vint Cerf said something long, long time ago that, when the Internet first came out, that we were all way overestimating its short term impact, and underestimating its long term impact on our lives. I feel exactly the same way about AI, that our lives are going to look completely different in 10 years, 30 years, 100 years, than they do right now, because of artificial intelligence, Medicine is the most obvious example, the ability to diagnose breast cancer, lung cancer, now, pancreatic cancer, three and four years ahead of time, that we could never do before, the whole notion of liquid biopsies, because of this. That, and medical misdiagnosis, we got a great bill that... apparently 10% of patient deaths every year are due to misdiagnosis. It's something like \$10 billion a year. Just think if we took the power of artificial intelligence, combine it with The Checklist Manifesto by Atul Gawande, and look at AI applied to reading the wrong medicine off the chart, or cutting off the wrong arm, or whatever it is, to really move us forward. There's an enormous amount of human good that can come from that, We don't want to take humans out of the loop, we're still going to need doctors, but what we're hearing from the radiologists is that they're much more effective, having AI tools to go with looking at the X rays, or the mammograms, or whatever else.

I've sat a couple of weeks ago with the young man who developed AlphaFold, and the ability to look at the folding of the proteins. Just imagine what that's going to do to pharmacology, in the near term. So many things are going to be done differently and better, because of things like AlphaFold, on and on and on. Grace Brightbill, who's my wonderful AI staffer, is with me. When she was at Princeton, she was a suicide prevention counselor, doing the phone calls the lifelines. Now, we've discovered the National Suicide Prevention Lifeline is using AI conversations to train people much faster and much better, than weekend after weekend after weekend, listening to other people's conversation, so that they can jump right in. You don't want a non-human being talking to the people that are in crisis, but you want people that are trained by them, that have all the conversations they base on.

We had a meeting a couple of weeks ago with the new AI foundation at the Veterans Affairs, and they're doing exactly this. They're looking at all the social media and other stuff that their veterans are posting, to be able to derive who's the most at risk and needs an intervention in the short run. There are risks of personal data privacy, but lots and lots to go.

How about Congress? Two years ago, our Al caucus was about six or seven people, and we mostly talked about the Terminator. Now, it's like 75 people. We had Sam Altman come and the room was packed, 150 people. Jack Clark from Anthropic come, the room was packed. There's a great deal of interest. There's 191 different Al bills pending in Congress right now. A lot of them, I think, are actually really good. The Al caucus is led by Republican Mike McCaul, Democrat Anna Eshoo, Republican Jay Obernolte, and me, a Democrat. So, we're trying to keep this out of the fights that are way too typical of a partisanly divided place, and one of the core missions is to try to take, of these 191 bills, which ones can we, should we, must we, pass this year, avoid the mistakes we made on social media where we did nothing for 25 years. And that message really resonates.

The good news was that Speaker McCarthy put together a task force to do this. The bad news is he got unseated. The good news is that Speaker Johnson and Democratic leader Hakeem Jeffries, I think are on the same page about standing up this informal working group, soon, this week, next week, week after, just trying to get 4 or 5, maybe 10, major AI bills done this year. Among them are the Create AI Act.

We've heard.. I was with Dario Gil, who's head of Research at IBM, the other night, who complained that even some people like IBM don't have enough resources to compete with the huge databases of OpenAI, of Google, of Microsoft and the like. That we need databases that are available to businesses, to academicians, to researchers. And so, this sets up creates a large curated database, probably not as large as Open AI.

Sam Altman said they scrubbed all 6 trillion words off the Internet a year ago when they set up GPT4. Now, if you scrub all 6 trillion words, maybe 40% of them are not even going to be true. They're going to be all kinds of stuff about Neo-Nazis, all the QAnon theories, but there's a lot of stuff that's not there. So, the idea of a curated data set is you let the scientists at the National Science Foundation etc., build it for all of us.

Another one, goes to the most basic part of AI safety, the notion of not allowing artificial intelligence to make the decision on a nuclear launch against China or Russia or North Korea or anyone else.

I will refer you to the Internet, but there are a lot of wonderful ideas out there that we are going to try to get done and build incrementally. I'm always suspicious of somebody that... any of us who are vain enough to think we can do regulate AI all at once in a really big masterful bill. They're trying to do that in Europe with and lots and lots of pushback. They're also, in Europe, by the way, they might disagree with this, but our perspective is, they are trying to manage and regulate the math and the science, whereas we think that that's impossible, and also not smart. What we're trying to do is regulate the end uses. If it violates privacy, if it puts it puts a child at risk, if it, of the many different things that it could do that are negative, how do we guard against that? There's a wonderful little firm across the river in Northern Virginia, whose only mission right now is to develop a taxonomy of the downside risks. In all the different use cases of AI, what are the things that we really have to worry about, because those are the things that we have to address and try to overcome.

So, finally, I think that this is an incredibly exciting time in terms of artificial intelligence, just all the different ways that people are using it day in and day out, and it showed up a lot last night in the Super Bowl, as most of which I didn't understand. But, the notion that we can act right now, we can act in a bipartisan way, we can pick the best 5 or 10 bills out of these 191 that make a difference, and then build on that in the years to come, will be a very healthy thing. Because, if we stick with the optimistic side, what AI can do to make each other's lives to be 120 years old, happily, and healthily, and the changes, not just in health, but in supply chains, and managements, and hopefully, even in democracy, could just be breakthroughs, as long as we protect on the downside.

I'm excited that all of you are here, which is very cool. Again, two years ago, we talked about AI, six people would show up, and you're not here to talk about the existential end of the world.

So, thank you for your attention this morning, and good luck in the rest of the day.